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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,103	08/21/2000	Clemens Luchner	951/48969	8675

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EXAMINER

TAMAI, KARL I

ART UNIT PAPER NUMBER

2834

DATE MAILED: 02/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,103

Applicant(s)

LUCHNER ET AL.

Examiner

Tamai IE Karl

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. This application contains claims 14-19 drawn to an invention nonelected with traverse in Paper No.7. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
2. Applicant's election of Group I in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stator and carrier with all the claimed limitations, additional indentation of profiled contact surface, the crankshaft, and the internal combustion engine must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The objection to the drawings for not showing the starter and generator device is withdrawn. The examiner notes that the amended drawings does not an attempt to

show the stator or carrier, therefore the objection is maintained and not overcome by the unentered drawings filed on 12/18/02.

4. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 12/18/02 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(f) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of the additional indentation being part of the wave profile is new matter.

Specification

5. The amended title "ELECTRICAL ROTATING MACHINE HAVING A ROTOR AND A STATOR EACH HAVING A NON-ROTATABLE CONNECTION BETWEEN CARRYING ELEMENT AND LAMINATIONS, AND METHOD OF MAKING SAME" has been entered into the file wrapper. The requirement of a new title is withdrawn.

6. The amendment filed 12/18/02 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the additional indentation being part of the wave profile.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

7. The objection to Claims 1-13 are withdrawn.

Claim Rejections - 35 USC § 112

8. The rejection of Claims 1-13 under 35 U.S.C. 112, first paragraph, is withdrawn.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-13 are vague and indefinite because it is unclear whether the Applicant is claiming an apparatus or a method of making an apparatus. The preamble indicates the invention is an electrical rotating machine apparatus, but the claim limitations "caused by plastic deformation" and "form locking contact is achieved....by electromagnetic forming" in claim 1 are method of making limitations. Additionally, claim 3 recites "jacket is molded by electromagnetic forming", claim 4 recites "shrinkage occurring with the cooling of the cast hub", claims 5-8 recite "is molded into the indentation during electromagnetic forming In order to advance prosecution on the merits, the examiner has considered these claims as "product by process claims". As a product by a process claim "even though the product-by process claims are limited by and defined by the process, determination of patent ability is based

on the product itself. The patent ability of the product does not depend on its method of production. If the product in the product by process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process". *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966(Fed. Cir. 1985).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-4 and 9-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schwartz (US 3,477,125).

Schwartz teaches a motor(rotor and stator) having a non-rotatable connection between the profiled contact surface of the rotor 34 and the form locking contact of the carrier 16.

Schwartz teaches the rotor hub/carrier 16 having a thin walled cylinder jacket 15.

Schwartz teaches all the structure claimed by the Applicant, but does not teach electromagnetic formation of the carrying element, form locking contacts on the carrying element formed by plastic deformation, or casting of the rotor rub. Because the structure of Schwartz is identical to the applicant's claimed structure, the product by process claim is anticipated by Schwartz under 35 USC 102, or is an obvious

modification of Schwartz under 35 USC 103 as an obvious method of manufacturing the known structure. In regards to claims 9-13, the limitations are merely intended use and do positively recite any additional structural language.

13. Claims 1-4 and 9-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Spreen (US 1,688,891).

Spreen teaches a motor (rotor and stator) having a non-rotatable connection between the profiled contact surface of the stator 18 and the form locking contact of the carrier 16. Spreen teaches the stator/carrier 16 having a thin walled cylinder jacket 17.

Spreen teaches the stator having an assignment between the wave crests and the stator winding slots. Spreen teaches all the structure claimed by the Applicant, but does not teach electromagnetic formation of the carrying element, form locking contacts on the carrying element formed by plastic deformation, or casting of the rotor rub.

Because the structure of Spreen is identical to the applicant's claimed structure, the product by process claim is anticipated by Spreen under 35 USC 102, or is an obvious modification of Spreen under 35 USC 103 as an obvious method of manufacturing the known structure. In regards to claims 9-13, the limitations are merely intended use and do positively recite any additional structural language.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz (US 3,477,125) and Day et al. (Day)(US 5,306,123). Schwartz teaches every aspect of the invention except the additional indentation on the rotor laminations to axially secure the rotor. Day teaches axial indentations 27, 29 in the laminations to prevent axial movement of the rotor. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Schwartz with the axial indentations of Day to prevent axial movement of the rotor.

16. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz (US 3,477,125) and West (US 4,471,252). Schwartz teaches every aspect of the invention except the intended use in a starter/generator with an internal combustion machine. West teaches a laminated core for use in a synchronous starter/generator used with an internal combustion engine. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Schwartz in the starter/generator of West to assure the laminated rotor core is secured to the shaft when rotated by the internal combustion engine.

17. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spreen (US 1,688,891) and Day et al. (Day)(US 5,306,123). Spreen teaches every aspect of the invention except the additional indentation on the laminations to axially

secure the core to the carrier. Day teaches axial indentations 27 in the laminations to prevent axial movement of the core on the carrier. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Spreen with the axial indentations of Day to prevent axial movement of the rotor.

18. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spreen (US 3,477,125) and West (US 4,471,252). Spreen teaches every aspect of the invention except the intended use in a starter/generator with an internal combustion machine. West teaches a laminated core for use in a synchronous starter/generator used with an internal combustion engine. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the rotor of Spreen in the starter/generator of West to assure the laminated rotor core is secured to the shaft when rotated by the internal combustion engine.

Response to Arguments

19. Applicant's arguments filed December 18, 2002 have been fully considered but they are not persuasive.

The Applicant's amended drawing have not been entered. The specification does not support the additional indentation being part of the wave profile 7.

The Applicant's argument that the functional recitation of the use as a starter or generator is persuasive, and the objection to the drawing regarding the feature is withdrawn. The Applicant's argument regarding the crankshaft and the internal combustion engine is not persuasive because the limitations are set forth in claims 9-13.

The Applicant's argument regarding the method of making limitations is not persuasive. The claim is vague and indefinite because the applicant is arguing the claim is an apparatus, while it clearly attempting to distinguish the limitation on the method of making limitations.

The Applicant's argument that the form-locking contact is achieved by electromagnetic forming is not persuasive because method of making limitations are not germane to the patentability of an apparatus. The electromagnetic forming limitation will may be addressed in a divisional application. As noted above the Applicant's claim is a product by process claim because it includes both apparatus and method of making limitations. As a product by a process claim "even though the product-by process claims are limited by and defined by the process, determination of patent ability is based on the product itself. The patent ability of the product does not depend on its method of production. If the product in the product by process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process". *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966(Fed. Cir. 1985). In this Application, the claims require the bundle of laminations must have a profiled contact surface for the rotor hub, which is form locked by a non-rotatable connection. This limitation is met by both Schwartz and Spreen, as set forth above. The rejection is proper and maintained.

The Applicant's argument that the electromagnetic forming provides a structural limitation is not persuasive. The structural limitation set forth in the claim is a form locking connection between the laminations and the hub. This limitation is met by

Schwartz by the form locking layer 23 between the laminations 11 and the rotor hub 32. This limitation is also taught by Spreen by the form locking layer 17 between the laminations 14 and the stator housing 16. Therefore the method of making the form layer is the same or obvious over Spreen and Schwartz.

The Applicant's argument that Spreen does not read on the claim limitations because the form locking contact is rubber, and therefore rotatable is not persuasive. Spreen specifically teaches the rubber layer is resiliently held against rotational and translatory motion (see the last line of claim 3). The Applicant's argument that the form locking layer is formed by electromagnetic forming is not persuasive because the method of making limitation is not germane to the patentability of the apparatus.

The Applicant's argument that the dependent claims are allowable because the independent claims are allowable is not persuasive because the independent claims are properly rejected as set forth above. The Applicant's argument that claim 5 is allowable because the additional indentation was not formed by electromagnetic forming is not persuasive. The method of making limitation is not germane to the patentability of the apparatus. Day teaches an indentation on the laminations 28-30, which is molded to the rotor hub 25-27, by the molded material 24. The Applicant's arguments that 27 is not an indentation is not persuasive. Figure 3 of Day clearly shows the lamination 28-30 forms an indentation on the inner radial surface of the laminations, and molded into the indentation by the molding material 24. While the reference number was cited in error by the examiner, the indentation in the lamination is clearly shown in the drawings. The rejection is proper and maintained.

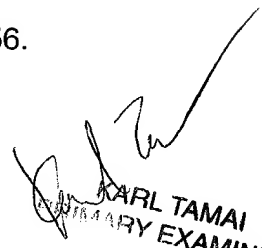
Conclusion

20. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai at (703) 305-7066. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-0956.

Karl I Tamai
PRIMARY PATENT EXAMINER
February 19, 2003


KARL TAMAI
PRIMARY EXAMINER